

CLAIMS

What is claimed is:

1. A system for maintaining and distributing a work schedule, the system comprising at least the following:

5 a schedule generator configured to generate work schedule data for a plurality of workers;

10 a database in communication with said schedule generator for storing said work schedule data; and

15 at least one employee interface positioned at at least one location within a work environment, wherein said at least one employee interface is in communication with said schedule generator and is configured to display work schedule data.

2. The system of Claim 1, wherein said work schedule data comprises data regarding employee work schedules that are not generated around one or more predetermined work shifts.
3. The system of Claim 1, further including a display monitor configured to display work schedule data to a plurality of workers.
4. The system of Claim 1, further including an attendance module configured to utilize said work schedule data and data regarding which workers are present in the work place for a given shift to define data representing worker attendance, and configured to provide the data representing the worker attendance to the schedule generator.

20 5. The system of Claim 4, wherein the schedule generator is adapted to generate at least further schedule data in response to the data representing worker attendance.

6. The system of Claim 1, further including a remote user interface in communication with said database to facilitate access by a remote user.

25 7. The system of Claim 1, wherein said employee interface comprises a networked computer having software to facilitate access to said work schedule data.

8. The system of Claim 7, wherein said employee interface further includes a printer.

9. A system to distribute a work schedule to a work force and allow for modifications to

said work schedule, the system comprising at least the following:

at least one data storage device adapted to store data representing the work schedule;

at least one computing device in communication with said data storage device to

organize, oversee distribution, and modify said data representing the work schedule;

5 and

at least one kiosk located remotely from said computing device, said kiosk in

communication with said computing device to provide an interface for given workers

to view their work schedules and to propose changes to their work schedules.

10. The system of Claim 9, wherein said at least one kiosk includes a display and user
10 interface software.

11. The system of Claim 9, further including an overhead display monitor in communication
with said computing device to display schedule information to a plurality of workers.

12. The system of Claim 9, further including an interface with an activity monitoring device
that is in communication with said computing device and that is adapted to determine whether at
15 least one worker at a place of work.

13. The system of Claim 9, further including an interface with an activity monitoring device
in communication with said computing device to monitor the activity of a worker at a place of
work.

14. The system of Claim 12, wherein said activity monitoring device includes an electronic
20 time clock.

15. The system of Claim 9, wherein said kiosk comprises a networked computer having
software configured to provide an employee interface.

16. The system of Claim 9, further comprising an attendance module adapted to compare, for
at least one given shift, a number of employees scheduled to work during the given shift to a
25 number of employees present during the given shift, and wherein the attendance module is
further adapted to route data resulting from the comparison to the computing device, and wherein
the computing device is adapted to initiate at least one modification to at least one work schedule
for at least a further shift, subsequent to the given shift, in response to the comparison.

17. A method for distributing and modifying a plurality of work schedules for a corresponding plurality of employees, the method comprising at least the following:
 - storing data representing the work schedules in a database;
 - enabling the employees to access the data representing their respective work schedules via at least one terminal located within a workplace;
 - creating at least one proposed modification of the work schedule data;
 - transmitting the proposed modification to the terminal for review by the given employees; and
 - enabling at least one of the given employees to accept the proposed modification at least at the terminal.
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18. The method of Claim 17, wherein enabling at least one of the given employees to accept the proposed modification includes enabling the given employees to perform at least one of signing up to work additional hours and to signing up to work fewer hours.
19. The method of Claim 17, wherein creating at least one proposed modification includes generating sheets representing respective ones of the proposed modifications and displaying the sheets on at least one of an overhead display and a terminal.
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20. The method of Claim 17, further including:
 - establishing a pool to which employees may post shifts that are available for trade;
 - enabling employees to post shifts to said pool;
 - enabling employees to accept shifts from said pool; and
 - modifying the work schedules based, at least in part, upon acceptance of shifts from the pool.
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21. The method of Claim 20, wherein establishing a pool includes storing a listing in the database of proposed shift changes posted by employees.
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22. The method of Claim 20, further comprising displaying shifts posted to the pool on a display adapted for viewing by a plurality of employees.
23. The method of Claim 17, wherein enabling at least one of the given employees to accept

the proposed modification includes enabling the give employees to accept the proposed modification via at least one of an overhead display monitors and a kiosk.

24. The method of Claim 17, further comprising:

modifying said employee schedules in response to an employee signing-up for said
5 opportunities for employees to modify their work schedule; and
storing said modified schedules in said database.

25. The method of Claim 17, wherein creating at least one proposed modification includes
posting at least one sheet that is created in response to a comparison between a number of
employees scheduled to work a given shift and a number of employees actually working the
10 given shift.

26. A method for modifying a preexisting schedule to account for changes in workload
arising after the preexisting schedule is created, the method comprising at least the following:

creating a sheet having at least one slot defined for a given work shift;
transmitting said sheet for viewing by a plurality of employees;
15 monitoring for a sign-up to a slot on said sheet by a signing-up employee; and
upon detecting a sign-up to said sheet:
accepting said sign-up onto said sheet;
modifying said sheet to reflect said sign-up; and
modifying said signing-up employee's schedule to reflect said sign-up.

20 27. The method of Claim 26, wherein creating a sheet comprises using a computer to create a
sign-up page adapted to support modifying a number of workers scheduled to work during a
particular period.

28. The method of Claim 26, wherein creating a sheet comprises using a computer to create a
sign-up page adapted to support increasing a number of workers scheduled to work during a
25 particular period.

29. The method of Claim 26, wherein creating a sheet comprises using a computer to create a
sign-up page adapted to support decreasing a number of workers scheduled to work during a

particular period.

30. The method of Claim 26, wherein creating a sheet includes creating the sheet in response to a comparison between a number of employees scheduled to work a given shift and a number of employees actually working the given shift.

5 31. The method of Claim 26, wherein transmitting includes showing said sheet only to employees qualified to work the work shift listed on said sheet.

32. The method of Claim 26, further comprising closing said sheet when all slots are filled due to sign-ups.

10 33. The method of Claim 26, further comprising posting said sheet on at least one of an overhead display and an employee interface.

34. A method for employees to change their work schedule using a scheduling system comprising:

creating a proposed shift trade, said proposed shift trade including at least posting employee shift information regarding shift hours and shift date;

15 posting said proposed shift trade to a shift pool, said shift pool configured to accept responses to said posting from other employees;

displaying said shift pool to a plurality of other employees;

monitoring said shift pool for a response from at least one responding employee to accept said proposed shift trade; and

20 whereby upon receiving said response, said method

accepts said response;

updates the work schedules of said posting employee and said responding employee; and removes said proposed shift trade from said shift pool.

25 35. The method of Claim 34, wherein said shift pool comprises a listing of proposed shift trades that can be viewed by employees seeking to modify their schedule.

36. The method of Claim 34, wherein said posting allows other employees to view and sign-up for said proposed shift trade.

37. The method of Claim 34, further including the block of displaying to an employee on an employee interface only the proposed shift trades that said employee on an employee interface is qualified to perform.
38. The method of Claim 34, wherein creating a proposed shift trade comprises;
 - 5 logging onto said scheduling system at an employee interface; and selecting which shift hours of a proposed shift trade said posting employee desires to post.
39. A method for taking employee attendance in a work environment having a plurality of employees, the method comprising at least the following:
 - 10 obtaining employee schedule data from at least one scheduling system, said employee schedule data representing a number of employees scheduled to work a given shift;
 - obtaining employee status data representing a number of employees actually at work during at least part of the given shift;
 - comparing said employee schedule data and said employee status data to determine a difference therebetween;
 - 15 routing data representing the difference to the scheduling system; and employing the data representing the difference as at least one input in modifying further schedule data applicable to at least one further shift that occurs subsequently to the given shift.
- 20 40. The method of Claim 39, wherein obtaining employee schedule data comprises polling a database to obtain schedule data created by the scheduling system.
41. The method of Claim 39, further comprising storing data representing the difference.
42. The method of Claim 39, wherein obtaining employee status data comprises interfacing with a network computer system to determine which employees are utilizing the network computer system.
- 25 43. The method of Claim 39, further comprising communicating the data representing the difference to a component related to tracking attendance violations.

44. The method of Claim 39, wherein comparing includes determining a number of employees at work during the given shift but not scheduled to work during the given shift.

45. The method of claim 39, wherein comparing includes determining a number of employees scheduled to work the given shift but not at work during the given shift.

5 46. A method for scheduling a plurality of employees comprising:

for a first employee, assigning at least one shift start time and at least one shift stop time for each of one or more work days based on the particular needs of the employer or the desires of the employee;

10 for a second employee, assigning at least one shift start time and at least one shift stop time for each of one or more work days based on the particular needs of the employer or the desires of the employee; and

for a plurality of other employees, assigning at least one shift start time and at least one shift stop time for each of one or more work days based on the particular needs of the employer or the desires of the employee;

15 wherein said start times and stop times for said first, said second and said plurality of other employees are not confined to predefined work shifts.

47. The method of Claim 46, wherein said predefined work shifts comprises division of the day into three 8-hour shifts.

48. The method of Claim 46, wherein said predefined work shifts start and stop at generally 20 the same time.

49. A scheduling apparatus for creating and displaying a work schedule, the scheduling apparatus comprising:

means for creating a schedule for each of a plurality of employees;

means for storing said schedule as schedule data;

25 means for allowing said employees to view said schedule data at a remote location;

means for retrieving said schedule data from said means for storing; and

means for displaying said schedule data to at least one of said employees at said remote

location.

50. The scheduling apparatus of Claim 49, further comprising means for printing said schedule upon request of one of said employees.

51. The scheduling apparatus of Claim 49, further comprising means for posting at least one sheet for display to said employees, wherein said sheet comprises a request to employees to modify their schedules as specified on said sheet.

52. The scheduling apparatus of Claim 51, wherein the means for posting is adapted to post the sheet in response to a difference detected between a number of employees scheduled to work a given shift and a number of employees actually working the given shift.

10 53. The scheduling apparatus of Claim 49, further including means for posting employee-initiated shift trade requests for viewing and sign-up by said one or more employees.

54. The scheduling apparatus of Claim 49, further including means for comparing schedule data representing a number of employees who are scheduled to work a given shift with worker status data representing employees who are actually working the given shift.

15 55. The scheduling apparatus of claim 54, further comprising means for posting at least one sheet for acceptance by the employees, wherein the posting means is responsive to the comparing means.

56. The scheduling apparatus of claim 54, further comprising means for posting at least one sheet for acceptance by the employees, wherein the posting means is responsive to the comparing means to post the at least one sheet in response to a difference detected between a number of employees scheduled to work a given shift and a number of employees actually working the given shift.

20 57. A computer program product comprising a computer usable medium having computer program logic recorded thereon for providing an automated employee schedule distribution system for use by an entity to distribute employee schedules and to assist in the modification of employee schedules, said computer usable medium comprising:

computer program code logic configured to store schedule data on a storage medium, wherein said schedule data comprises the work schedules of a plurality of employees;

computer program code logic configured to monitor for requests for said employee data from employees at employee interfaces;

computer program code logic configured to transmit said employee data to said employee interface;

5 computer program code logic configured to allow for establishment of at least one sheet containing slots for employees to sign-up for additional or reduced hours

computer program code logic configured to display said at least one sheet to at least one employee; and

computer program code logic configured to accept employee sign-up to said at least one sheet.

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58. The computer program product of Claim 57, wherein said storage medium comprises a hard disk drive.

59. The computer program product of Claim 57, further including computer program code logic configured to allow a posting employee to post proposed shift trades to a shift pool.

15 60. The computer program product of Claim 59, further including computer program code logic configured to display said shift pool so that employees other than posting employees can view said proposed shift trades and sign-up to work shifts in said shift pool of proposed shift trades.

20 61. A system for taking employee attendance in a work environment having a plurality of employees, the system comprising at least the following:

means for obtaining employee schedule data from at least one scheduling system, said employee schedule data representing a number of employees scheduled to work a given shift;

25 means for obtaining employee status data representing a number of employees actually at work during at least part of the given shift;

means for comparing said employee schedule data and said employee status data to determine a difference therebetween;

means for routing data representing the difference to the scheduling system; and

means for employing the data representing the difference as at least one input in modifying further schedule data applicable to at least one further shift that occurs subsequently to the given shift.

62. At least one program storage device readable by a machine, tangibly embodying a
5 program of instructions executable by the machine to perform a method for taking employee attendance in a work environment having a plurality of employees, the method comprising at least the following:

obtaining employee schedule data from at least one scheduling system, said employee schedule data representing a number of employees scheduled to work a given shift;

10 obtaining employee status data representing a number of employees actually at work during at least part of the given shift;

comparing said employee schedule data and said employee status data to determine a difference therebetween;

routing data representing the difference to the scheduling system; and

15 employing the data representing the difference as at least one input in modifying further schedule data applicable to at least one further shift that occurs subsequently to the given shift.